

AMENDMENT TO THE SPECIFICATION

Change paragraph 0004, as follows:

A1
[0004] Liquids to be mixed are liquid A and liquid B, and passages for transferring the respective liquids to the pump chamber 3 are joined together at a merging point 13 on ~~this~~ the side of the check valve 5 ~~on the inlet side to be~~ connected to the pump chamber 3. Switch valves VA and VB are disposed on the respective passages between the merging point 13 and the liquid A and between the merging point 13 and the liquid B.

Change paragraph 0006, as follows:

A2
[0006] The discharge side of the pump chamber 3 is connected to a mixer 19 for mixing the liquids through the check valve 7. A passage from the mixer 19 is connected to one end of a column 23 for separating a sample through an injector 21 for injecting the sample. The other end of the column 23 is connected to an ultra violet detector (hereinafter referred to as ~~AUV~~ UV detector) 25 for detecting the separated sample.

Change paragraph 0009, as follows:

A3
[0009] In the plunger reciprocation type pump of a low-pressure gradient system using switch valves, there has been a problem such that in case there is a displacement among the axes of a disk to which the position sensor 17 is disposed, motor 9 and cam 11, the suction start point, i.e. top dead point, is also displaced, so that it is impossible to obtain an accurate mixing ratio. Also, there has been a problem such that in case there ~~are~~ is a machining error of the cam 11, a response delay, or a discrepancy in response speeds at the timing of opening or closing of the respective switch valves, an error is made between the predetermined mixing ratio and the mixing ratio of the liquids actually transferred. Further, there has been a problem such that the mixing ratio error as described above is different in every device.

Change paragraph 0035, as follows:

A4
[0035] A relationship between a plunger position (angle) and discharge-suction speed (discharge volume and suction volume per unit time) is schematically illustrated in Fig. 2. The graph represents changes in the discharge and suction speeds of the liquid transfer device with time. Since one reciprocation motion of the plunger 1 of the liquid transfer device shown in Fig. 1 corresponds to one cycle of the liquid transfer, two suction cycles ~~is~~ are shown as one gradient cycle that corresponds to two reciprocation motions of the plunger 1. The angles are rotation angles of the cam 11.

Change paragraph 0046, as follows:

A5
[0046] A liquid transfer device 35 includes, as in Fig. 1, a plunger 1, pump chamber 3, check valves 5 and 7, motor 9, cam 11, switch valves VA and VB, control portion 15, position sensor 17, operation portion 27, mixing ratio error calculation portion 29, memory portion 31, and valve switching timing correction portion 33. Liquid A ~~which~~ is pure water and liquid B is an acetone water wherein a small amount of acetone is added to pure water. On the discharge side of the pump chamber 3, there are provided a mixer 19 and a UV detector 25 in this order, through the check valve 7. The liquid transfer device 35 includes a terminal 37 for taking a detected signal of the UV detector 25 into the operation portion 27.